

eye and back upon the neck, another straight line behind the eye, and both are often more or less broken into spots.

“Carapax dusky mottled with yellowish, a great black spot surrounded with a pale *areola* upon each discoidal (!) plate, dorsal ridges blackish with pale border, and lower parts wholly yellowish-white.

“Some are brighter coloured than others, and the ocelli become proportionally smaller as they increase in size.

“The carapax of our largest specimen measured 9 by  $6\frac{1}{4}$  inches, but it probably is not nearly full-grown.”

*Hab.* Burmah.

#### 7. CISTUDO DENTATA, Gray.

There is a fine adult specimen of this species in the Collection, also from Mergui.

### BOTANICAL SOCIETY OF EDINBURGH.

December 11, 1856.—Professor Balfour, Vice-President, in the Chair.

The following papers were read:—

1. “Description of a Method of Preserving Plants of their Natural Form and Colour,” by Thomas R. Marshall, Esq.

The plant should be placed in a box, in such a manner as to preserve the natural disposition of its parts; fine sawdust (perfectly dry) of box, or other hard wood, is then to be carefully sprinkled over it, taking care not to shift the position of the leaves. The plants ought to be quite fresh when put into the box. About a fortnight in the dust is sufficient to dry the plants in summer (in a natural heat); succulent plants require a longer time.

2. “On the species of Pine called in Moffat ‘Dr. Walker’s Pouch Fir,’” by Professor Fleming.

3. “On some new species of Marine Diatomaceæ from the Firth of Clyde,” by Professor Gregory.

4. “Notice of Hepaticæ, found near Aberfeldy,” by John Lowe, Esq.

The author enumerated fifty-five species.

The third meeting of the session was held on January 8, 1857.—Professor Balfour, Vice-President, in the Chair.

The following papers were read:—

1. “On the production of Ergot on Rye,” by Kenneth Corbet, Esq.

The author stated that he found that native ergot was more certain in its medical action than that imported from the Continent.

2. “On a Monstrosity in the Fruit of *Silene inflata*, with some remarks on Placentation,” by A. Dickson, Esq.

Mr. Dickson exhibited a specimen with partitions in the ovary. He considered that the specimen he produced went to support the view of central placentation in all cases, as suggested by Schleiden.

## 3. "Notice of Plantain Flour," by Murray Thomson, Esq.

Plantain meal is prepared by taking off the skin from the fruit, slicing the pulpy core, and then drying and powdering it. The meal has the odour of fresh hay or tea. It has a sweetish taste, and partially dissolves in the mouth. By analysis, 100 parts were found to consist of—

Water .....	12·33
Starch .....	71·60
Gum .....	4·42
Sugar .....	2·40
Cellulose .....	5·99
Plastic constituents—	
Albumen .....	2·01
Oil .....	0·50
Soluble Salts .....	0·64
	<hr/>
	99·89

## 4. "Analyses of Three Australian Wines," by Murray Thomson, Esq.

The author had analysed three samples of wine sent to Professor G. Wilson from Australia.

No. 1. "Miton:" resembled port wine in colour. The bouquet was good. It was found to contain 11·30 per cent. of alcohol, also sugar and tartrate of potash in small quantity, and traces of phosphate of lime and magnesia, acetic and sulphuric acids, and chlorine.

No. 2. "Frontignac:" resembled sherry in colour, also with a good bouquet, but rather sweet. It contained 16·00 per cent. alcohol, also sugar, tartrate of potash and soda, traces of lime and magnesia, acetic acid, and chlorine.

No. 3. "Casiquar:" had a port-wine colour, good bouquet, and rather sweet taste. It contained 18 per cent. of alcohol, also sugar, tartrate of potash and soda, traces of lime and magnesia, and phosphates, acetic and sulphuric acids, and chlorine.

These wines are pure and good, although not so showy or so full-bodied as the wines supplied from Spain and the other wine countries. Their poverty in bouquet may be accounted for by their comparative youth, being at most only three years old. Their all being acid may be explained by the circumstance that the sample bottles were not tightly closed. On the whole these wines are beyond the average of many wines sent to the British market, both as regards purity and strength. The cultivation of the vine and the manufacture of wine will no doubt be carried on extensively in Australia.

5. "On the injurious effects of *Urocerus gigas* on Fir-trees," by the Rev. A. Thomson.

The author stated that last summer his forester had observed a Scotch fir-tree about thirty-five years old die very suddenly. The tree was cut down and taken to the saw-mill. During the preparation of the wood a large fly was observed in a burrow in the wood. Subsequently another fly, a grub, and the remains of a cocoon were seen. The insect was examined, and found to be the *Urocerus gigas*. It

has been rarely noticed in Scotland. It appears, however, that in Germany it often causes great destruction in the forests.

6. "On the Occurrence of the Seeds of Bearded Darnel in inferior samples of Wheat," by George S. Lawson, Esq.

7. "Notes on *Pinus Cephalonica* and other Coniferæ, at Craigo House, Montrose," by Mr. P. S. Robertson.

Mr. Robertson read a notice of a large number of plants of *Pinus Cephalonica*, which are growing at Craigo House, about three miles from the sea, on dry sandy soil which overlies soft freestone rock, and in the vicinity of limestone. The trees had been raised from seed and planted about eighteen years ago. They appeared to be in perfect health, making growths of 12 to 15 inches each year; a good many having now attained to 12 and 15 feet in height.

Mr. Lowe made some verbal remarks on the effects of lightning upon Larch-trees. During the violent storm which occurred on the 7th of August last, a larch-tree, standing in a field at the west end of the village of Fortingal, was struck by lightning. Commencing about a yard from the summit, the electric fluid passed in a spiral direction down the trunk, making five-and-a-half coils in its descent, and peeling off the bark to the breadth of five or six inches. Half-way down the tree the current appears to have been divided by an intervening branch, and from this point the spiral coil is double, diverging as it nears the base, where one of the currents has passed into the earth to the west and the other to the east side, after having thrown down a portion of stone wall which opposed its progress. At the point of entrance of this current the earth was torn up, and a large opening left. Another larch, about a mile to the east of Fortingal, was struck in a similar manner and on the same evening.

## MISCELLANEOUS.

### *Observations on the Pteropus of Australia.*

By J. K. E. FAIRHOLME.

THE acquisition of a Flying Fox to the Gardens of the Society, induces me to bring before your notice a few observations I have made on the habits of this animal in the country about Moreton Bay, on the east coast of Australia, about lat. 27° south.

The flying fox is well known even in the southern parts of Australia in the summer months; but by far the largest flights are seen in the warmer latitudes. The attention is generally attracted to them (just as daylight disappears) by the heavy flapping sound of their wings, as they fly in great numbers overhead; all in the same direction. These flights often continue to pass for many hours together on the way to their feeding-places, generally about the banks of rivers, where the tree known as the Flooded-gum grows, on the leaves of which they feed. Though scattered over a large extent of country while feeding at night, they all contrive to assemble again to spend the heat of the day together, and when the flight is large, the scene